

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Petition of USTelecom for Forbearance)	WC Docket No. 18-141
Pursuant to 47 U.S.C. § 160(c) to Accelerate)	
Investment in Broadband and Next-)	
Generation Networks)	
)	
Regulation of Business Data Services for)	WC Docket No. 17-144
Rate-of-Return Local Exchange Carriers;)	
Business Data Services in an Internet)	
Protocol Environment; Special Access for)	
Price Cap Local Exchange Carriers)	
)	
Business Data Services in an Internet)	WC Docket No. 16-143
Protocol Environment)	
)	
Special Access for Price Cap Local)	WC Docket No. 05-25
Exchange Carriers)	

REPLY COMMENTS OF INCOMPAS

Karen Reidy
Vice President
INCOMPAS
www.incompas.org
kreidy@incompas.org

John T. Nakahata
Henry Shi
HARRIS, WILTSHIRE & GRANNIS LLP
1919 M Street NW, Eighth Floor
Washington, DC 20036
(202) 730-1320

Counsel for INCOMPAS

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REPLY COMMENTS OF INCOMPAS

INCOMPAS, on behalf of itself and its respective members, submits these reply comments in response to the April 15, 2019, Public Notice,¹ and to recent ex parte filings from USTelecom relating to its petition for forbearance.²

¹ See *Wireline Competition Bureau Seeks Focused Additional Comment in Business Data Services and USTelecom Forbearance Petition Proceedings and Reopens Secure Data Enclave*, WC Docket Nos. 18-141, 17-144, 16-143, 05-025, RM-10593, Public Notice, DA-19-281 (rel. Apr. 15, 2019) (“*Public Notice*”).

² See Letter from Patrick R. Halley, Senior Vice President, Advocacy and Regulatory Affairs, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed May 10, 2019) (“USTelecom May 10 Ex Parte”); Letter from Patrick R. Halley, Senior Vice President, Advocacy and Regulatory Affairs, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141 (filed May 6, 2019) (“USTelecom May 6 Ex Parte”); Petition

I. INTRODUCTION AND SUMMARY

The record in the USTelecom forbearance proceeding shows that there is no basis for granting the sweeping forbearance originally requested by USTelecom in its May 4, 2018 petition. In its most recent filings, made in the days before and after the opening comments in response to the *Public Notice*, USTelecom appears to acknowledge³ that a nationwide approach that “loftily abstract[s] away from all specific markets” is not appropriate.⁴ After over a year of steadfastly refusing to conduct any market-specific analyses to support its request for relief, USTelecom proposes now—with less than three months remaining until the statutory deadline for Commission action—to introduce data on cable providers’ self-reported deployment and to rely on the Commission’s 2017 *BDS Order*, to support a different set of requests for relief. These data (which were a six-month update of previously available data), and the new competition tests proposed in its latest ex parte filings, materially alter the original May 4, 2018, petition, such that it should not be considered by the Commission to justify forbearance.⁵ On the merits, USTelecom’s latest arguments also fail to meet its burden of proof that the requested forbearance from Section 251(c)(3) unbundling and Section 251(c)(4) resale are warranted.

of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks, WC Docket No. 18-141 (filed May 4, 2018) (“Petition”).

³ See USTelecom May 10 Ex Parte at 1.

⁴ *U.S. Telecom Ass’n v. F.C.C.*, 359 F.3d 554, 569 (D.C. Cir. 2004) (quoting *U.S. Telecom Ass’n v. F.C.C.*, 290 F.3d 415, 423 (D.C. Cir. 2002).

⁵ See Comments of INCOMPAS at 5, WC Docket Nos. 18-141, 17-144, 16-143, 05-25 (filed May 9, 2019) (“INCOMPAS Transport PN Comments”).

First, USTelecom now asks the Commission to make policy decisions that will affect competition and fiber deployment nationwide based on data that both the Commission and industry agree are deeply flawed. USTelecom attempts to use Form 477 data to rebut the more granular testimonies and analyses submitted by INCOMPAS members as to the competitive choices available to consumers in specific local communities. But the Form 477 data are insufficient to do that: the Form 477 data on cable deployment, which USTelecom cites again and again as proof of ubiquitous facilities-based competition, systematically overstate the extent of actual availability of cable services. Just recently, a majority of the Commissioners testified that improvements to these data are necessary for policymakers to be able to determine with confidence where broadband service is or is not available. Even assuming, *arguendo*, that cable services are suitable substitutes for the types of services provided using unbundled loops and transport, and in many cases they are not, the Commission should not rely on unreliable data in making this policy decision.

Second, USTelecom's invocation of the Commission's 2017 *BDS Order* to support the elimination of unbundling for DS1 and DS3 loops and transport distorts the analysis in, and undermines the policy goals of, that decision. USTelecom and its supporters argue that forbearance from unbundling requirements must follow as a logical consequence of the Commission's findings in the *BDS Order*. However, far from being a prelude to the elimination of unbundling rules, the *BDS Order*'s predictions about competitive entry rely on new fiber construction by carriers such as INCOMPAS members, which are presently happening in large part due to the market-opening effects of UNEs. The *BDS Order* projected that competition would emerge to serve the 86% of BDS locations with cumulative bandwidth at or under 50 Mbps served by only a single provider—competition that INCOMPAS members can provide, but

have a long way to go to spread their deployments. USTelecom denigrates these competitors, but many are using UNEs as a bridge to building broadband networks. Companies such as Socket Telecom, LLC (“Socket”) and Sonic Telecom, LLC (“Sonic”) began as entirely UNE-based companies, but now serve a significant percentage of their customers on their own fiber (approximately 34% for Sonic, and 49% for Socket), and also use third-party non-ILEC facilities where possible. This competition, providing valuable choices for consumers in and of itself, also spurs cable providers and the incumbents to deploy fiber facilities in unserved and underserved areas. Competitive providers are already motivated to deploy fiber in part because of the “natural forbearance” of UNE availability as ILECs retire and replace their copper facilities. This approach is precisely what INCOMPAS and others have consistently maintained is the best policy to encourage competition, protect customers’ continued access to advanced services, *and* spur fiber investment by incumbents and competitive providers alike.

USTelecom’s reliance on the results of the *BDS Order*’s competitive market test is also misplaced because USTelecom attempts to use the *predictions* of eventual competition made over two years ago to substitute for proof of actual competition today. The *BDS Order*’s competitive market test relied on the Commission’s predictive judgment that providers with fiber within a half-mile of a given customer location will enter the market in the “medium term” of three to five years. Now, more than two years after the *BDS Order* went into effect, the burden of showing that competitive providers with nearby fiber have actually entered the market in significant numbers rests with USTelecom. There is no evidence in the record that there has been such competitive entry, and USTelecom should not be allowed to shift its burden of proof under the Commission’s forbearance procedures. To the contrary, over 25 declarations from competitive providers and thousands of comments and letters from customers in the docket all

confirm that competition is still struggling to emerge in many areas of the country, even in counties the Commission predicted would be competitive in the *BDS Order*.

Third, USTelecom has failed throughout this proceeding to show that the forbearance requested will serve the public interest. Competitive providers have explained repeatedly in declarations entered into the record how access to unbundled loops and transport have enabled them to build customer bases and then deploy their own fiber networks, often in smaller markets unserved by ILEC or cable fiber facilities. In some of these communities, such as in Andale, Kansas, and Fayette, Missouri, cable withdrew from providing broadband. Maintaining access to UNEs as a bridge to fiber deployment unquestionably serves the public interest, both by enabling the provision of competitive, advanced wireline telecommunications and data services, and also by spreading the dense, fiber-rich networks that are essential for 5G wireless technology. USTelecom has yet to explain how the availability of UNEs discourages investment in fiber—especially when ILECs themselves can limit unbundling obligations by deploying fiber loops. It has also failed to explain why eliminating UNEs, which it and its supporters repeatedly insist are rarely used and increasingly irrelevant, will incentivize ILECs to invest in its networks in those communities that they have so far ignored and failed to upgrade, even in some cases to the levels necessary to provide PRIs.

Fourth, USTelecom has not refuted the evidence in the record that TDM-based voice services are a distinct product market from VoIP, and that voice services resale under Section 251(c)(4) are an essential check on the ILECs' continued dominance of that market.

USTelecom's reliance on Form 477 data to support its argument for forbearance from this obligation ignores both the deep flaws in that data, and the fact that the data is entirely irrelevant

to the TDM voice service product market since it reports only broadband—and therefore VoIP—availability.

Because USTelecom has failed to meet its burden of proof under Section 10(a) of the Communications Act, and under the Commission’s forbearance procedures, its remaining requests for forbearance from unbundling obligations and from Section 251(c)(4) resale requirements should be denied.

II. THERE IS WIDESPREAD AGREEMENT AMONG INDUSTRY MEMBERS AND POLICYMAKERS THAT THE FORM 477 DATA ARE FATALLY FLAWED AND CANNOT BE RELIED ON IN REASONED POLICYMAKING

USTelecom and supporting commenters focus heavily on the supposed ubiquity of cable broadband to support further nationwide elimination of unbundling obligations and of price caps on TDM transport services.⁶ But this argument relies a remarkably unreliable source in the self-reported Form 477 data. Both the Commission and industry have called into question the accuracy and precision of the Form 477 data when used to determine whether broadband service is available at any given address. Those same criticisms of the data apply equally to the proposed use by USTelecom for determining whether competitive services are available.

As Chairman Pai noted in recent testimony before the Communications and Technology Subcommittee of the House Energy and Commerce Committee, the Commission has sought to improve both the precision and the accuracy of the data reporting on the availability of

⁶ USTelecom May 6 Ex Parte at 3–7, 10; Comments of AT&T at 2, WC Docket Nos. 18-141, 17-144, 16-143, 05-25 (filed May 9, 2019) (“AT&T Transport PN Comments”); Comments of CenturyLink at 4, WC Docket Nos. 18-141, 17-144, 16-143, 05-25 (filed May 9, 2019); Comments of Frontier Communications Corp. at 2, WC Docket Nos. 18-141, 17-144, 16-143, 05-25 (filed May 9, 2019); Comments of Verizon at 2, WC Docket No. 18-141 (“Verizon Comments”) (filed May 9, 2019).

broadband service.⁷ Commissioners O’Rielly, Rosenworcel, and Starks agreed in their testimony that Form 477 data, on which the national broadband map is based, needs improvement.⁸ These statements join the chorus of industry participants—including both incumbents and competitive providers—that have highlighted shortcomings in the data. As previously noted in the record,⁹ the Commission’s current method of deeming an entire census block as “served” whenever even one address within the census block *could be* served overstates the availability of broadband service, including service offered by cable providers.¹⁰ The

⁷ House Energy and Commerce Committee, Subcommittee on Communications & Technology Hearing, “Accountability and Oversight of the Federal Communications Commission” (May 15, 2019), <https://energycommerce.house.gov/committee-activity/hearings/hearing-on-accountability-and-oversight-of-the-federal-communications> (beginning at 2:02:37) (“[W]e’re currently in the process of revamping that Form 477 process working with stakeholders from different sectors of the industry to figure out how to improve it and that problem [Rep. McEachin] identified about the census block being deemed covered if a single household in the block is getting service but nowhere else is.”); *id.* (acknowledging errors in the initially reported 2017 data that overstated the extent to which the digital divide has been closing).

⁸ Commissioner O’Rielly acknowledged that third-party challenges were “how we found some of the problems with our current maps.” *Id.* (beginning at 2:30:48). Commissioner Rosenworcel described the broadband map as “a mess.” *Id.* (beginning at 51:00). And Commissioner Starks noted that errors in the data had resulted in the Commission’s broadband having initially “inflated its coverage by nearly 62 million persons” before it was corrected by a public interest group. *Id.* (beginning at 55:45).

⁹ *See, e.g.*, INCOMPAS Transport PN Comments.

¹⁰ *See* Reply Comments of USTelecom at 3, WC Docket Nos. 10-90, 14-58, 07-135, CC Docket No. 01-92 (filed Apr. 8, 2019); Letter from Thomas Jones, Counsel for Granite, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 2 (filed Apr. 24, 2019) (citing Senate Commerce Committee testimony from USTelecom CEO noting that the “one-served-all-served” reporting in Form 477 “is simply not a reliable approach); John Kahan, Chief Data Analytics Officer, “Broadband mapping meeting with Preston Wise - FCC” at 3–4 (Mar. 27, 2019), filed as an attachment to Letter from Paula Boyd, Senior Director, U.S. Government and Regulatory Affairs, Microsoft Corporation and David A. LaFuria, Lukas, LaFuria, Gutierrez & Sachs, LLP, Counsel for Microsoft Corporation, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-238 & WC Docket No. 11-10 (Mar. 29, 2019) (reporting

Commission has likewise recognized that “it is not necessarily the case that every household, housing unit, or person will have coverage of a service in a census block that [Form 477] analysis indicates is served.”¹¹

In addition to the likely overstatement of broadband penetration rates, the Form 477 data, as AT&T has observed, also *understates* the number of communities that do not have access to broadband at all, because there is no reporting on areas that do not have such access.¹² This methodological defect prevents the Commission from obtaining an accurate picture of unserved areas, which “is critical to . . . assessing when adequate deployment has been achieved.”¹³ AT&T’s perceptive observation is validated by declarations in the record from competitive providers that use unbundled transport and loops to serve communities lacking other options for broadband service.¹⁴

Microsoft study finding that only approximately 49 percent of Americans are using “internet at broadband speeds,” compared to the 92 percent that the Commission reports as having access according to the Form 477 data).

¹¹ *Communications Marketplace Report* ¶ 184, Report, FCC 18-181 (rel. Dec. 26, 2018). The Commission also saw it fit to caveat that the Form 477 may further contain errors “to the extent that broadband providers fail to report data or misreport data.” *Id.*

¹² *See* Letter from Ola Oyefusi, Director, Federal Regulatory, AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 11-10, 10-90, at 1 (filed Oct. 12, 2018) (“While it may seem logical to map where broadband is available in order to determine where it is lacking, collecting data only on deployed areas *does not* provide the information necessary to effectively promote deployment to areas that still have no broadband.”).

¹³ *Id.* at 1–2.

¹⁴ *See* Declaration of Daniel Friesen ¶ 2 (“IdeaTek Decl.”), attached as Attachment 11 to Opposition of INCOMPAS, FISPA, Midwest Association of Competitive Communications, and the Northwest Telecommunications Association, WC Docket No. 18-141 (filed Aug. 6, 2019) (“Competitive Carriers Group Opposition”); Declaration of Dusan Janjic ¶ 2, attached as Attachment 16 to Competitive Carriers Group Opposition (“Virginia Global Decl.”);

These are critical deficiencies. The declarations and analyses submitted by INCOMPAS members show that competition is varied and nuanced, both geographically and in terms of the products and services provided. For example, communities in unincorporated portions of Reno County and Sedgwick County, Kansas;¹⁵ San Bernardino County, Kern County, Santa Barbara County, and San Luis Obispo County, California;¹⁶ Wasco County, Oregon,¹⁷ all of which are deemed competitive under the *BDS Order*,¹⁸ the INCOMPAS member serving those areas is the only broadband service provider. ILECs and cable providers both make strategic decisions about where they can best deploy both their capital and management capabilities—and this means that there are geographic and product holes in the offerings by each that other competitive providers, using UNEs, can fill.

USTelecom and its supporters have given no valid reason in the record for accepting the Form 477 data for purposes of dismantling incumbent unbundling and resale obligations, when the admitted flaws undermine their usefulness in the context of universal service funding. In its May 6 Ex Parte letter, USTelecom asserts that although “it is essential to have more granular

Declaration of Todd Matthew Way ¶ 2, attached as Attachment 7 to Competitive Carriers Group Opposition (“Douglas FastNet Decl.”).

¹⁵ See IdeaTek Decl. ¶ 4.

¹⁶ See Declaration of Raul Alcaraz ¶ 2, attached as Attachment 14 to Competitive Carriers Group Opposition (“Race Decl.”); Declaration of Jeff Buckingham ¶ 2, attached as Attachment 6 to Competitive Carriers Group Opposition (“Digital West Decl.”).

¹⁷ See Declaration of Dan Bubba ¶ 2, attached as Attachment 9 to Competitive Carriers Group Opposition (“Gorge Networks Decl.”).

¹⁸ See List of Counties Where Lower Speed TDM-Based Business Data Services Are Deemed Competitive, Non-Competitive, or Grandfathered, <https://docs.fcc.gov/public/attachments/DOC-344863A1.pdf> (WCB, May 15, 2017) (“BDS County List”).

last-mile broadband availability data in the context of, for example, targeting scarce federal universal service dollars to unserved locations, the existing Form 477 data are perfectly adequate to assess the environment for the deployment of competitive facilities.”¹⁹ But there is no basis for making this distinction. In both contexts, the Commission’s policymaking depends on having accurate data to be able to determine the extent to which end users can obtain service, whether from zero, one, two, or more providers. USTelecom’s assertion that the flawed Form 477 data is “perfectly adequate” for determining where there is existing competition begs the very question driving the Commission’s efforts for more accurate service availability data.²⁰ Just four days later, USTelecom seemed to argue instead that the Commission should continue using census blocks as the most granular geographic unit both for purposes of analyzing competition in its forbearance proceeding, *and* in the context of targeting universal service funding support to reach unserved addresses.²¹ Notwithstanding USTelecom’s apparent changing position, the Commission should maintain a consistent approach by requiring more accurate and granular data, and not by scaling back its efforts to improve the quality of data, both for purposes of analyzing competition and for deploying universal service support.

By all indications, the Commission appears committed to improving the quality of its broadband data. Chairman Pai just recently noted the importance of resolving the Form 477 proceeding. However, doing so would be an empty accomplishment if the Commission will have already decided to eliminate rules that enable competition and broadband deployment in

¹⁹ USTelecom May 6 Ex Parte at 6 n.25.

²⁰ *Id.*

²¹ USTelecom May 10 Ex Parte at 2.

those areas where it is lacking. Until the Commission can complete its Form 477 proceeding and have confidence in the data it has collected about the extent of broadband penetration and competition, it cannot rely on data that it knows to be flawed to make policy decisions with nationwide impact.

III. USTELECOM HAS NOT MET THE BURDEN OF PROOF FOR ANY OF THE REMAINING RELIEF SOUGHT IN ITS FORBEARANCE PETITION

A. The Record Does Not Support Deregulation of ILEC Transport Service

As the *April Data Tables* show, facilities-based competition for ILEC interoffice transport services is far from ubiquitous. Approximately 34% of the verified ILEC wire centers located in areas that were not deregulated prior to the *BDS Order* have *zero* competitive providers with fiber located within a half-mile.²² For the wire centers that do have competitive fiber located within a half-mile, there is no record evidence indicating that those fiber owners have the ability to offer a competitive alternative. USTelecom and its supporters argue that higher revenues from transporting aggregated end user traffic will support competitive entry where there is nearby fiber,²³ and that cable providers will bypass ILEC networks entirely, and make competitive transport available in areas where there is no fiber near the serving wire center. While both may be true in some cases, there is no evidence in the record that this entry is occurring nationwide.

First, contrary to the ILECs' suggestions, the fact that the Eighth Circuit did not address the merits of the Commission's finding of nationwide transport competition in no way means that

²² See INCOMPAS Transport PN Comments at 8.

²³ See, e.g., USTelecom May 6 Ex Parte at 8–9; AT&T Transport PN Comments at 9.

the Eighth Circuit ratified the Commission's (flawed) analysis.²⁴ Having concluded that the Commission lacked notice to proceed to issue final rules with respect to BDS transport, the court appropriately remanded without further consideration of the merits arguments. Any other action by the court would have been an advisory opinion, prejudging a record that had not been fully developed because of lack of notice. The ILECs cannot bootstrap UNE forbearance onto a BDS analysis that the Commission had not given adequate notice to reach.

Second, the record shows that elimination of unbundled interoffice transport will harm competition, and reduce choices for consumers. As competitive providers have repeatedly made clear in their declarations, a large portion of unbundled DS1 transport are used together with DS1 loops to create enhanced extended loops ("EELs"). Using EELs, a competitive provider is able to offer both TDM-based services as well as IP-based data services to customers that may be located many miles away from the central office at which the competitive provider is collocated. Competitive providers have invested to upgrade switches and other equipment at their collocation sites, which then enables them to provide advanced services not offered by the ILEC to the remotely located customer.

Unbundled EELs promote competition in two ways. First, they allow a carrier entering a market to reach that market remote from the carrier's switching and routing facilities to build a customer base prior to building out its own fiber infrastructure.²⁵ INCOMPAS members have

²⁴ See AT&T Transport PN Comments at 5 n.5; Verizon Comments at 5 n.10; USTelecom May 6 Ex Parte at 9 n.42.

²⁵ See Competitive Carriers Group Opposition at 13–15; Gorge Networks Decl. ¶ 9; Declaration of Mark Sollenberger ¶ 12, attached as Attachment 5 to INCOMPAS Transport PN Comments ("First Communications Decl."); Digital West Decl. ¶¶ 5, 11; *see also* INCOMPAS Transport PN Comments at 20–21; Declaration of R. Matthew Kohly ¶ 12,

done just that. For example, EELs enable Socket to first gain a foothold in a community where it is not yet collocated at the serving wire center, and they subsequently collocate there “and expand its product offering through the use of DS0 loops and DS1 loops.”²⁶ With that customer base in place, Socket was able to “deploy a fiber network and serve those customers and gain additional customers as it built the broadband network.”²⁷ Socket now serves about half of its lines using its own fiber—but when it started, none of its lines was over its own fiber.²⁸ Similarly, UNEs, including EELs, uniquely aid Allstream’s ability to invest in fiber facilities “because Allstream can begin to serve the customer, then build the fiber, and, UNEs unlike business data services, [do] not require [Allstream] to make extended term commitments beyond the period needed to build fiber.”²⁹

Second, EELs are used to reach remote sites for multi-location customers otherwise served from a competitive provider’s existing network footprint or service area.³⁰ Socket, for

attached as Attachment 7 to INCOMPAS Transport PN Comments (“Socket Supp. Decl.”) (stating that, in connection with serving a healthcare provider that has 90 locations, Socket “was only able to find competitive alternatives for two of them”).

²⁶ Declaration of R. Matthew Kohly ¶ 23, attached as Attachment 15 to Competitive Carriers Group Opposition (“Socket Decl.”).

²⁷ *Id.* ¶ 26.

²⁸ Second Supplemental Declaration of R. Matthew Kohly ¶ 2, attached hereto as Attachment 1 (“Socket Second Supp. Decl.”).

²⁹ Declaration of Douglas Denney ¶ 9, attached as Attachment 4 to Competitive Carriers Group Opposition (“Allstream Decl.”).

³⁰ Socket Supp. Decl. ¶ 4 (“The only way Socket could serve this multi-location community college and provide it with a competitive choice for all of its locations is through the availability of DS1 dedicated transport and DS1 loops. Over time, Socket will convert as many of these satellite locations as possible to its own network.”).

example, offers services to customers that have many locations in Missouri, whose needs “range[] from basic local and long distance voice service, ISDN-PRI services in addition to private lines, and dedicated Ethernet services to more advanced and sophisticated services such as MPLS and WAN services and related services such as data backup, storage, and retrieval.”³¹ One such customer is a provider of skilled nursing, assisted living, and senior services, with 90 facilities spread throughout Missouri,³² and another is the Missouri public defender with offices across the state. Unbundled transport is essential to Socket’s ability to offer a competitive alternative for these kinds of customers, since only the ILEC has the ubiquitous reach as a legacy from its monopoly days. Yet another example is a Missouri state law enforcement agency, which has widely scattered offices that Socket will not be able to reach on its own facilities, but which Socket can connect to its own network using UNEs and to other agency offices served by Socket’s own fiber network.³³

Where a competitive provider uses unbundled transport to reach remote customers, or to serve individual satellite offices of a multi-location customer, there is no reason to assume that there is enough aggregate traffic to support competitive entry by a new transport service provider. Even if there were significant aggregate demand for transport services, there is no evidence that the same competitive providers with fiber near one end of an interoffice transport route also have fiber near the other end. Without some indication of the ability to extend their network to *both* wire centers, there is no prospect of competitive entry into point-to-point routes

³¹ Socket Supp. Decl. ¶ 10.

³² *Id.* ¶ 12.

³³ Socket Second Supp. Decl. ¶ 4

that the Commission has identified as the relevant market.³⁴ Thus, AT&T's analogy³⁵ to the Commission's use of proximity to the customer location in the *BDS Order* is not applicable to the economics of transport, because a competitive provider would need to extend its network at both ends in order to collocate.

Moreover, there is no evidence in the record that companies with transport fiber within a half-mile of ILEC wire centers have business models that fit the needs of competitive providers and the customers they serve. Like the ILECs, many fiber network builders focus on areas with higher revenue potential than those that are available in the communities served by competitive providers that use UNEs. Others may build facilities in a smaller community, but only as necessary to serve the one or two larger enterprise customers located there. Thus, a regional medical center in a suburban or rural area may have multiple fiber providers nearby willing to extend their networks for its business, but the same providers would have no plans to offer services to the residential and small business customers in the same area.

The cable "bypass" theory is also no substitute for evidence of adequate transport competition. This theory posits that the proximity of cable facilities to the end user enables cable

³⁴ See *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers et al.*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16978, 17200 ¶ 360 (2003) ("*TRO*"). Of course, the Commission can consider the presence of competitive fiber within a certain distance of all wire centers in making its competition determinations. However, USTelecom and its supporters have not offered any evidence that this information is a *better* estimate of competition than the existing competition triggers under the existing impairment standard. If anything, the lack of evidence of significant market entry by nearby fiber providers since the *BDS Order* took effect suggests that the Commission overestimated the likelihood of entry.

³⁵ AT&T Transport PN Comments at 9.

providers to carry traffic that would otherwise be carried over ILEC transport networks.³⁶

However, there is no evidence in the record that cable providers actually offer an equivalent transport service to third-party competitive providers at a scale comparable to ILEC offerings available under existing rules. The point-to-point data solutions offered by cable providers to their business end-user customers by definition cannot impose any competitive constraints on ILEC transport pricing in areas where the cable provider is not also directly serving the competitive provider's end user. As noted above, there is no reliable data supporting the assertion of ubiquitous availability of cable broadband Internet access service. Indeed, in a recent filing USTelecom appears to concede that transport will not be competitive for interoffice routes where either end is a Tier 3 wire center,³⁷ and thus it is now undisputed by USTelecom that existing unbundling obligations for dark fiber transport (which must have one end in a Tier 3 wire center to be available as a UNE) and DS1/DS3 transport (including EELs) to or from Tier 3 wire center transport should continue to apply.³⁸

Dark fiber transport has enabled competitive providers to bring high-speed service to the most remote communities, as well as serve as a bridge to build out the providers' own facilities. Socket, for example, has deployed a fiber optic ring to support several communities in central

³⁶ See USTelecom May 6 Ex Parte at 2 & n.7, 11.

³⁷ See USTelecom May 6 Ex Parte at 3 (revising requested relief from unbundling obligations with respect to transport services offered on routes between wire centers that are either Tier 1 or Tier 2).

³⁸ See 47 C.F.R. § 51.319(d)(2)(iii)(A) (“[T]he incumbent LEC must unbundle DS3 transport if a wire center on either end of a requested route is a Tier 3 wire center.”); *id.* § 51.319(d)(2)(iv) (“An incumbent LEC must unbundle dark fiber transport if a wire center on either end of a requested route is a Tier 3 wire center.”).

Missouri, and the ring includes portions consisting of unbundled dark fiber, which Socket is incrementally replacing.³⁹ IdeaTek was able to use dark fiber transport to bring high-speed service to a small town of under 1,000, which “had neither an ILEC nor cable-based wireline broadband product,” even though it was located only “10 miles west of Kansas’ largest municipality, Wichita.”⁴⁰ Unbundled fiber transport is especially important for connecting entire isolated communities, especially given the caps on the number of unbundled DS1 (ten) and DS3 (twelve) transport circuits available in each route.⁴¹

As Uniti Fiber has explained, loss of this element will have a devastating impact on its ability to expand networks into new markets and would “essentially balkanize Uniti Fiber’s existing network infrastructure into separate unconnected ‘islands’ that lack transport capacity to move traffic to and from Uniti Fiber’s core network.”⁴² As with other elements, carriers invest heavily in the use of this element by installing their own equipment in order to “light” the dark fiber it obtains from the incumbent.⁴³

³⁹ Socket Decl. ¶ 8; *see also* Declaration of Fletcher Kittredge ¶ 13, attached as Attachment 10 to Competitive Carriers Group Opposition (“GWI Decl.”) (“Eight years ago GWI was entirely dependent on dark fiber interoffice transport UNEs. In the intervening interval, GWI has replaced most dark fiber interoffice transport UNEs with dark fiber it has constructed itself or in partnership with others.”).

⁴⁰ IdeaTek Decl. ¶ 5.

⁴¹ *See* 47 C.F.R. §§ 51.319(d)(2)(ii)(B), 51.319(d)(2)(iii)(B).

⁴² Reply Comments of Uniti Fiber at 5, WC Docket No. 18-141 (filed Sept. 5, 2018).

⁴³ *See id.*

B. DS0 Copper Loops Remain Essential for the Delivery of Competitive Voice and Data Services in Many Markets to Both Business and Residential Customers

As INCOMPAS members have explained in the record, competitive providers continue to use unbundled ILEC copper loops to provide both digital and analog services to both business and residential customers.⁴⁴ USTelecom argues that competition from cable providers warrants eliminating ILEC unbundling obligations for “digital DS0 loops,” and that the availability of mobile wireless voice and VoIP services mean that “there is no basis whatsoever for continued unbundling of analog DS0 loops.”⁴⁵ As it had done in its original petition, USTelecom misunderstands the vital role that unbundled copper loops still play, and this misunderstanding has also confused the terminology for the facilities on which USTelecom seeks forbearance relief.

Under the Commission’s rules, ILEC are required to provide unbundled access to “two-wire and four-wire analog voice-grade copper loops,” “digital copper loops (*e.g.*, DS0s and integrated services digital network lines),” and “two-wire and four-wire copper loops conditioned to transmit the digital signals needed to provide digital subscriber line services.”⁴⁶ They are also required to perform necessary steps to condition loops to make them available for

⁴⁴ See Competitive Carriers Group Opposition at 38–42; Allstream Decl. ¶ 15; Declaration of James Bellina ¶ 9, attached as Attachment 5 to Competitive Carriers Group Opposition (“Dialog Telecom Decl.”).

⁴⁵ USTelecom May 6 Ex Parte at 8.

⁴⁶ 47 C.F.R. § 51.319(a)(1); *see also* TRO ¶ 249 (“[W]e conclude that incumbent LECs must provide unbundled access to local loops comprised of copper wire. That is, incumbent LECs shall provide, as a UNE, access to the complete transmission path comprised of a copper local loop between the central office and the customer's premises.”).

carrying digital subscriber line signals.⁴⁷ The division USTelecom draws between “analog DS0” loops” and “digital DS0” loops does not map clearly with any of the three categories set out in the Commission’s unbundling rules for how a copper loop must be made available, or to industry practice with respect to the how copper loops are provisioned or used.

1. Copper Loops Made Available as Analog Voice-Grade Loops

USTelecom argues that forbearance is warranted for “analog DS0 loops.”⁴⁸ However, all copper loops are capable of transmitting analog signals. Presumably USTelecom is referring to the requirement to make two-wire and four-wire copper loops available as analog voice-grade copper loops under the Commission’s unbundling rules, as it bases its request for relief on shifts in households away from switched access POTS to VoIP and mobile wireless for voice services.⁴⁹ USTelecom asserts that in light of these aggregate trends, forbearance should be granted nationwide because “analog DS0 loops . . . are used virtually exclusively to provide residential voice service.”⁵⁰ Even if this generalization were true (which it is not), VoIP and mobile wireless voice services do not render POTS obsolete even for residential customers. As the Commission acknowledged, “a significant portion of consumers view coverage equivalent to that traditionally found in wireline telephony as essential,” especially in the wake of natural disasters.⁵¹

⁴⁷ 47 C.F.R. § 51.319(a)(1)(ii)

⁴⁸ See USTelecom May 10 Ex Parte at 1.

⁴⁹ See USTelecom May 6 Ex Parte at 8.

⁵⁰ *Id.*

⁵¹ *Technology Transitions et al.*, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 30 FCC Rcd. 9372, 9491 ¶ 232 (2015).

Moreover, businesses and other non-residential customers also continue to receive voice and other analog services through unbundled voice-grade copper loops.⁵² As Granite explained, the reliability of analog connectivity has special importance for those businesses that rely on the operation of critical systems such as medical alerts, fire/sprinkler monitoring, gas pipeline monitoring, bank vault or burglar alarms, and elevators that require reliable back-up systems for unexpected failures, even where VoIP services provided over managed networks (i.e., not over the public internet) are available.⁵³ Analog voice-grade copper loops are also essential for traditional fax machines, which are still used heavily by doctors' offices, pharmacies, and other healthcare facilities,⁵⁴ as well as for legacy credit card payment processing systems for which reliability is essential. Thus, the uses of analog voice-grade copper loops extend beyond the "residential voice market."

⁵² See IdeaTek Decl. ¶ 3; Declaration of Jeff Rhoden ¶ 2, attached as Attachment 12 to Competitive Carriers Group Opposition.

⁵³ Declaration of Larry Antonellis ¶¶ 18–19, attached as Attachment A to Opposition of Granite to USTelecom's Forbearance Petition, WC Docket No. 18-141 (filed Aug. 6, 2018); *see also* Digital West Decl. ¶ 12 (noting that fire alarm and other emergency lines depend on the reliability of POTS); Socket Decl. ¶ 48 ("[C]ustomers rely on TDM-based business telephone service for medical alerts, fire/sprinkler monitoring, gas pipeline monitoring, bank vault, burglar alarms, elevators, and even back-up data connections.").

⁵⁴ See Letter from Jason B. Williams, Chief Executive Officer, Blackfoot Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 18-141, at 2 (filed Aug. 2, 2018) ("Having access to UNE loops enables Blackfoot to use its own fiber or fixed-wireless solution as the primary connection for one path and utilize a UNE loop connection as an alternative path [for hospital and bank customers].").

2. *Copper Loop Made Available as a “Digital Copper Loop”*

Under the Commission’s rules, “digital” loops refer to copper loops that can be used to transmit digital signals, including DS0s or integrated services digital network (“ISDN”).⁵⁵ (Loops that are conditioned to transmit DSL services are a third category, discussed below.) USTelecom does not distinguish between the two different categories of copper loops in its request for forbearance with respect to “digital DS0 loops,” though it appears to match more closely to the Commission’s reference to “digital copper loops.”

USTelecom also asserts that broadband Internet access services offered by cable providers and satellite providers “obviates any need for unbundling of DS0 digital loops,” and thus the Commission should grant forbearance in those census blocks in which cable providers reportedly offer broadband Internet access service of at least 25 Mbps downstream and 3 Mbps upstream.⁵⁶ As it does with analog voice-grade loops, USTelecom ignores that the higher quality services provided using digital copper loops are not substitutable by best-efforts broadband Internet access services—a differentiation that the Commission recognized in the *BDS Order*.⁵⁷ ISDN service, for example, offers integrated voice and data capabilities and offers multiple channels over the same connection. As Socket has explained, ISDN primary rate interface service enables a customer, “to send multiple Caller ID numbers letting them differentiate

⁵⁵ 47 C.F.R. § 51.319(a)(1).

⁵⁶ USTelecom May 6 Ex Parte at 7–8; *see also* USTelecom May 10 Ex Parte at 1.

⁵⁷ *See Business Data Services in an Internet Protocol Environment et al.*, Report and Order, 32 FCC Rcd. 3459, 3474 ¶ 31 (2017) (“*BDS Order*”).

specific locations or departments,” which enables law enforcement and other emergency responders to know the specific location of the call from, for example, a school campus.⁵⁸

3. DSL-Capable Two-Wire and Four-Wire Copper Loops

The Commission’s unbundling rules also refer to two-wire and four-wire copper loops that are conditioned to enable the provision of digital subscriber line (“DSL” or “xDSL”) services. The rules also require the incumbent to perform necessary steps to condition loops to make them available for carrying digital subscriber line signals.⁵⁹ Competitive providers use unbundled DSL-capable loops to offer both voice and data services, to both residential and business customers.⁶⁰ It is not clear whether USTelecom’s latest revised request to forbear from unbundling with respect to “digital DS0 loops” applies to xDSL-capable copper loops, as the copper loops themselves are not “digital” but instead support the transmission of digital (or analog) signals with the proper electronics and other equipment. Thus, an xDSL-capable loop itself, under the Commission’s definition, could also be used to transmit analog voice traffic. In any case, USTelecom’s request for forbearance in those census blocks in which cable providers reportedly offer broadband Internet access service of at least 25 Mbps downstream and 3 Mbps

⁵⁸ Socket Decl. ¶ 11.

⁵⁹ Line conditioning involves “the removal from a copper loop or copper subloop of any device that could diminish the capability of the loop or subloop to deliver high-speed switched wireline telecommunications capability, including digital subscriber line service.” *Id.* § 51.319(a)(1)(ii)(A). The ILEC “shall condition a copper loop [or copper subloop]. . . to ensure that the copper loop or copper subloop is suitable for providing digital subscriber line services.” *Id.* § 51.319(a)(1)(ii).

⁶⁰ *See* Competitive Carriers Group Opposition at 12–20.

upstream, to the extent applied to DSL-capable copper loops, should be denied.⁶¹ Likewise, to the extent that the requested relief applies to existing ILEC obligations to perform line conditioning to ensure that the copper loops are suitable for providing DSL service, USTelecom's request should also be denied.

First, as discussed above, the data on which USTelecom relies likely overstates the geographic reach of cable broadband services and facilities. In many parts of the country, including many smaller communities and geographically remote communities, unbundled DSL-capable copper loops offer the only means for customers to receive broadband (and broadband and voice bundled) service.⁶² The self-reported presence of a cable provider in a census block in the Form 477 data, even assuming it is accurate, does not reflect the actual availability of service for residents and businesses located in that census block. In many of these communities, the size of a census block may be significantly larger than the averages cited by USTelecom. As the Census Bureau notes, in "remote areas, census blocks may encompass hundreds of square miles."⁶³ For larger census blocks, the Commission should not assume that a cable provider

⁶¹ For reasons explained in INCOMPAS's opening comments to the *Public Notice*, the introduction of a substantively modified forbearance request at this point in the process raises significant procedural fairness concerns too significant for it to be considered on the merits. See INCOMPAS Transport PN Comments at 4–5.

⁶² See, e.g., Virginia Global Decl. ¶¶ 2–3, 12; Digital West Decl. ¶ 2 ("Digital West is the only DSL broadband provider through a remote terminal in the Nacimiento Lake area northwest of Paso Robles, where the incumbent local exchange carrier ('ILEC') is AT&T."); IdeaTek Decl. ¶ 2 ("In many cases, such as the Kansas towns of Bentley, Andale, and Mount Hope, the incumbent telephone provider (AT&T or CenturyLink) provides no broadband services in our service area, and a majority of our entire service territory has no cable operator.").

⁶³ U.S. Census Bureau, "What Are Census Blocks," <https://www.census.gov/newsroom/blogs/random-samplings/2011/07/what-are-census-blocks.html>. (July 11, 2011).

offering service to any one customer in the block means that it is capable of serving all of the residents or businesses in the census block.⁶⁴

Second, as INCOMPAS and others explained in their opposition to USTelecom’s original forbearance petition, the availability of unbundled loops and transport, including specifically xDSL-capable copper loops, promotes the public interest by spurring both incumbents and competitive providers to invest in fiber facilities.⁶⁵ For incumbents, replacing their existing copper plant with fiber has the potential benefit of ending its loop unbundling obligations. To the extent that ILECs are concerned with the “rising per-unit costs” of maintaining copper facilities,⁶⁶ the incentives created are for more and faster fiber deployment, rather than less. This “natural forbearance” process means competitive providers are faced with the prospect of copper retirement, thereby also prompting investment in fiber so that they can move their customers from the copper plant before it is retired.

As providers like Digital West, Gorge Networks, Mammoth, Socket, and Sonic have explained extensively in the record, their preference is to deploy their own fiber, where deployment is economically feasible, to offer customers faster service than can be provided over

⁶⁴ As Chairman Pai indicated in recent testimony, the Commission is working to address a key problem of the Form 477 data: that census blocks are deemed covered if a single household in the block is reported as it could be served, even if nowhere else in the census block is.

⁶⁵ *See* Competitive Carriers Group Opposition at 9, 45–52; *see also, e.g.*, Digital West Decl. ¶ 13 (“Our entry utilizing UNEs has pushed other broadband providers to upgrade their services. The local cable company, Charter/Spectrum has recently upgraded speeds in San Luis Obispo County, and AT&T has begun building some limited fiber to high end homes in San Luis Obispo.”).

⁶⁶ Verizon Comments at 9.

unbundled loops.⁶⁷ And they have consistently done so, expanding their fiber loop networks. This record contradicts the notion that UNEs are underpriced and that their use sends “inefficient pricing signals” that dampen investment incentives.⁶⁸ Taking on the risk and cost necessary to deploy fiber-to-the-premises networks would make no economic sense if competitive providers were, as ILECs claim, content simply to rely on UNEs. Moreover, the record also indicates that incumbents are in fact responding, albeit slowly and unevenly, to the investments made by competitive providers, by making improvements to their own facilities.⁶⁹ In parts of the country where unbundled DSL-capable copper loops remain the only competitive alternative for

⁶⁷ Digital West Decl. ¶ 5 (“Where and when possible, Digital West deploys its own fiber facilities to serve customers.”); Gorge Networks Decl. ¶ 4 (“Where and when possible, Gorge Networks deploys its own facilities to serve customers. We currently serve 75% of our customers over our own fiber-to-the-premises network or our fixed wireless network.”); Declaration of Brian Worthen ¶ 5, attached as Attachment 13 to Competitive Carriers Group Opposition (“Mammoth Decl.”) (“Where and when possible, Mammoth deploys its own facilities to serve customers. Mammoth currently provides broadband to 2,883 customers over its own last-mile fiber network.”); Socket Decl. ¶ 6 (“Socket is able to provide these same services at greater speeds and with more reliability over its own fiber network than leased UNE facilities; which is why Socket prefers to use its own fiber network when it is available.”); Declaration of Dane Jasper ¶ 9, attached to Opposition of Sonic Telecom, LLC to Petition for Forbearance of USTelecom, WC Docket. No. 18-141 (filed Aug. 6, 2018) (“Sonic Decl.”) (“Today 28% of Sonic’s customers are served over its own fiber. Two years ago Sonic served just 4% of its customers over its own fiber.”).

⁶⁸ AT&T Transport PN Comments at 7.

⁶⁹ See Digital West Decl. ¶ 13 (“The local cable company, Charter/Spectrum has recently upgraded speeds in San Luis Obispo County, and AT&T has begun building some limited fiber to high end homes in San Luis Obispo.”); Mammoth Decl. ¶ 2 (“For example, within two years of us offering service in Ranchester, Wyoming, CenturyLink and the cable company rolled out their own broadband offerings. Likewise, CenturyLink rolled out its own DSL in Douglas, Wyoming less than six months after we rolled ours out.”); Sonic Decl. ¶ 13 (“Since Sonic’s deployment of fiber in San Francisco, Comcast and Wave cable have upgraded their cable networks to deliver gigabit service, and AT&T has deployed significant fiber-to-the-home there.”).

broadband service, if not the only option, ILEC fiber deployment will be even less likely without the pressure exerted by competitive providers.⁷⁰

Third, access to DSL-capable copper loops also enable competitive providers to offer advanced services by adding their own electronics and other equipment, even before deploying their own fiber networks. Sonic, for example, uses its own electronics together with unbundled DSL-capable copper loops to offer 50/15 Mbps using VDSL2 over a single loop or up to 100/30 Mbps over a bonded pair of loops.⁷¹ Unbundled DSL-capable copper loops enable competitive providers to innovate and invest in ways to deliver more to customers who would otherwise have no choice but to wait for the eventual arrival of a fiber network.

C. The *BDS Order* Does Not Support Eliminating Unbundling Requirements for DS1 and DS3 Loops.

More than a year after its petition was filed, USTelecom has yet to conduct the geographic- and product market-specific analysis of unbundled DS1 and DS3 loops required by the

⁷⁰ The notion that UNEs, which in USTelecom’s estimate “play a very minor and diminishing role in this competitive marketplace,” Petition at 15, come even close to moving the needle on ILEC decisions on capital investments worth hundreds of billions of dollars is more than far-fetched. There is no doubt that the ILECs are making investments *somewhere*, but with declining capital budgets, *see, e.g.*, Mike Dano, “AT&T Hints at Possible Decline in Capex in 2020,” *Light Reading*, <https://www.lightreading.com/mobile/5g/atandt-hints-at-possible-decline-in-capex-in-2020/d/d-id/750124> (Mar. 13, 2019), areas with lower revenue potentials are even less likely to receive additional investment. What the record makes clear is that there are many other areas where competitive providers, and not ILECs, are making the necessary investment in fiber deployment and making advanced services available to underserved communities. *See* David E. M. Sappington, *Premature, Ubiquitous Forbearance Will Harm Consumers*, at 16–17, attached as Attachment 1 to Competitive Carriers Group Opposition.

⁷¹ Sonic Decl. ¶ 4; *see also* Digital West Decl. ¶ 9 (“Digital West can deploy its own electronics on either end of the DS0 loop. In this way, Digital West can customize and control the services provided over the loop, including service quality and security.”).

Commission’s framework for evaluating petitions to forbear from Section 251(c) requirements.⁷² In lieu of that analysis, USTelecom and its supporters cite the *BDS Order* as the beginning and end of its argument in favor of forbearance, based on the following line of reasoning: (1) unbundled DS1 and DS3 loops are indistinguishable from DS1 and DS3 channel terminations, and (2) the Commission’s predictive judgment about competitive entry used to conduct the competitive market test for DS1 and DS3 channel terminations in 2017 is still applicable in 2019. Therefore, USTelecom concludes, the results of the competitive market test for DS1 and DS3 channel terminations in 2017 mean that forbearance from unbundling requirements for DS1 and DS3 loops is warranted in 2019.⁷³ Neither premise, however, is supported by the record; and even if they were, the conclusion does not follow.

First, although DS1 and DS3 loops, and DS1 and DS3 channel terminations, are used to provide business data services, they are not interchangeable. Unlike DS1 and DS3 channel terminations, DS1 and DS3 unbundled loops are not subject to multiyear term commitments, and thus enable competitive providers to more quickly transition their customer base to their deployed fiber networks.⁷⁴ This makes UNEs a more suitable bridge for fiber deployment than special access circuits.

⁷² See Motion for Summary Denial of INCOMPAS et al. at 12–13, WC Docket No. 18-141 (filed Aug. 6, 2018) (“Motion for Summary Denial”).

⁷³ See USTelecom May 6 Ex Parte at 4 (“Because (no matter how they are obtained) DS1 and DS3 loops are only used to provide business data services, the Commission’s findings in the BDS proceeding – which the Eighth Circuit affirmed – are the definitive statement on competition for these services.” (footnote omitted)).

⁷⁴ See Gorge Networks Decl. ¶ 6 (“UNEs uniquely assist our ability to build fiber facilities because . . . unlike business data services, we do not need to make extended term

Second, the Commission’s predictive judgment “on the impact of one nearby competitor ensuring reasonably competitive outcomes in the medium term,”⁷⁵ is not the appropriate input into any competitive market test that would be conducted for unbundled DS1 and DS3 loops, even if they were the functional equivalent of DS1 and DS3 channel terminations. Any competitive market test used today to determine whether there would be sufficient constraints on ILEC market power if forbearance were granted cannot reasonably rely entirely on the same predictions made more than two years ago. At a minimum, USTelecom needs to present some evidence that the predictions have been proven correct (or not) in some locations, in order to satisfy the requirements of Section 10(a) and the Commission’s forbearance procedures. Otherwise, it would impermissibly shift the burden of proof on those opposing forbearance. Neither USTelecom nor its supporters have presented any such evidence in the record of emerging facilities-based competition since the *BDS Order* took effect. The record does, however, have many examples of ILEC price increases that have occurred since the *BDS Order* went into effect, as well as declarations from competitive providers stating that ILEC facilities, whether used for TDM or Ethernet, remain the only way to reach end users.⁷⁶ This is more consistent with market power stemming from high barriers to entry, than with the *BDS Order*’s prediction of price-disciplining entry.

commitments beyond the period needed to build fiber, which lowers the effective cost of fiber deployment.”).

⁷⁵ *BDS Order* ¶ 124.

⁷⁶ *See* Competitive Carriers Group Opposition at 32–33.

Finally, even if both of USTelecom's premises were correct, its conclusion that there should be near-nationwide elimination of unbundling for DS1 and DS3 loops does not follow. Most obviously, USTelecom fails to explain why the same competitive market test, using the same inputs, should result in nationwide deregulation for loops, when the *BDS Order* expressly concluded that there was not even a sufficient prospect of competition in nearly 30 percent of all counties in the United States.⁷⁷ USTelecom also does not explain how its revised forbearance request, which calls for eliminating loop unbundling based in both the counties deemed competitive and in all census blocks that have at least one cable provider, is consistent with the *BDS Order's* use of counties in its competitive market test.⁷⁸ Neither census blocks nor counties are sufficiently granular geographic units.

More fundamentally, however, forbearance is inappropriate because the logic of the *BDS Order* contemplates the coexistence of the current unbundling rules with the new BDS price cap regime. The Commission acknowledged in the *BDS Order* that the retirement of ILEC copper facilities and their replacement by fiber may lead to a gradual decline in the use of unbundled loops,⁷⁹ which is the "natural forbearance" that INCOMPAS and others have urged the Commission to follow instead of USTelecom's extreme request. The more geographically granular competition determinations in the Commission's unbundling rules also act as a backstop

⁷⁷ See *BDS Order* ¶¶ 141–42 (concluding that, based on the competitive market test, 72 percent of all counties and county equivalents would be deemed competitive).

⁷⁸ See USTelecom May 10 Ex Parte at 1.

⁷⁹ See *BDS Order* ¶ 34.

to help provide some check on ILEC market power in the portions of counties, including “competitive” counties, where there are no alternatives to the ILEC.⁸⁰

Unbundled loops can serve as an appropriate, targeted backstop because the geographic availability of unbundled loops is far more limited than the territories that had been under price caps before the *BDS Order*.⁸¹ Unbundled loops are available only to competitive carriers that have interconnection agreements with ILECs and that, among other requirements, have received state certification to provide local voice service.⁸² In addition to these much more stringent requirements, unbundled loops were available only at wire centers where providers would be “impaired” in their ability to compete without unbundled access to ILEC network elements. These restrictions provide a more granular framework for assessing competition, and one with which the Commission and industry are already familiar.

In contrast, when the Commission developed a competitive market test in the BDS proceeding, the starting point was measuring competition at the level of the metropolitan statistical area under the Pricing Flexibility rules. In selecting counties as the geographic unit for making competition determinations, the Commission emphasized that the size of counties relative to census blocks or census tracts made them more “administratively feasible” for both the

⁸⁰ Verizon’s observation that “virtually all transport UNEs are purchased in counties that the Commission has deemed competitive” is entirely consistent with the *BDS Order*’s broad deregulatory sweep leaving many communities outside of dense metro areas without facilities-based alternatives. *See* Verizon Comments at 10.

⁸¹ *See BDS Order* ¶ 32.

⁸² *See* 47 C.F.R. § 51.318(b)(1).

Commission and industry,⁸³ even though the smaller units are “more precise.”⁸⁴ Because the availability of unbundled loops are already determined at the wire-center level, there is no added administrative burden compared to using counties. Indeed, switching to both a geographically larger unit (counties) and smaller unit (census blocks), as USTelecom suggests, is likely to introduce much more administrative burden than continuing to apply the existing impairment test.

D. Eliminating Access to Unbundled Loops and Transport Slows Investment in the Fiber Necessary for 5G Deployment Outside of the Densest Metro Areas.

Promoting fiber deployment in those areas of the county unserved or underserved by ILEC fiber is especially important to the Commission’s goal of promoting 5G wireless deployment. As INCOMPAS and others have explained, the backhaul network required for 5G is fundamentally different in scale than the backhaul required for the macro cell towers used for 3G and 4G service.⁸⁵ The technical properties of 5G spectrum require smaller, more closed dispersed cell sites, which in turn require much more extensive fiber backhaul networks. USTelecom understands that making 5G service across the country requires “increasingly dense

⁸³ *BDS Order* ¶¶ 109–111.

⁸⁴ *Id.* ¶ 115.

⁸⁵ Verizon’s assertion that 3G and 4G “wireless services were deployed rapidly and broadly across the United States with very little use of UNEs or CLEC fiber” thus is incorrect and misses the point. Verizon Comments at 13. 4G penetration into rural areas has not been accomplished “rapidly and broadly,” and the backhaul needs of 5G coverage vastly exceed the backhaul needs for existing mobile wireless networks. In any case, UNEs are not used directly for wireless backhaul because the Commission’s unbundling rules prohibit such use. *See TRO* ¶ 365.

fiber networks . . . extended further throughout the country—including to our most remote areas.”⁸⁶

The record in this proceeding demonstrates that in many of these areas, competitive providers are filling in the gaps in the fiber networks of both the ILECs and the larger enterprise fiber providers, which are racing to serve the denser and more revenue-rich urban commercial centers. The policy rationales behind the unbundling requirement in Section 251(c) and the Commission’s rules to use UNEs to promote facilities-based competition in those markets where providers would otherwise be impaired also apply to the deployment of fiber for 5G backhaul. The public interest benefits of bringing fiber to those otherwise underserved or unserved areas must factor into the Commission’s forbearance analysis under Section 10(a).

E. Public Interest and Competition Would Be Harmed by the Elimination of the Avoided-Cost Resale Requirement in Section 251(c)(4).

As the record reflects, and as is addressed in the filing of the Joint Parties,⁸⁷ USTelecom has not met its burden of proof to demonstrate that the public in general and competition in particular will be advantaged by forbearance from the avoided-cost resale requirement in Section 251(c)(4). As the Joint Parties have shown (1) TDM-based telephone service provided via copper loops (“traditional TDM service”) constitutes a separate product market; (2) business and government customers – especially those with multiple locations – that rely on the unique characteristics of traditional TDM service continue to demand that service in large volumes; (3)

⁸⁶ Jonathan Spalter, CEO, USTelecom, “5G—It’s All About the Wires,” *Multichannel News*, <https://www.multichannel.com/blog/5g-its-all-about-the-wires> (Sept. 28, 2018).

⁸⁷ See Reply Comments of Granite, MetTel, and Access One, WC Docket No. 18-141 (filed May 28, 2019).

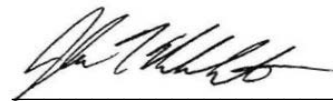
ILECs have substantial and persisting market power in the provision of traditional TDM service; (4) avoided-cost resale under Section 251(c)(4) is essential to limiting ILECs' ability to abuse that market power; and (5) the costs associated with maintaining avoided-cost resale regulation are minimal. Additionally, the Joint Parties' filing today provides data demonstrating that the demand for traditional TDM service among federal and state government customers remains strong today and will almost certainly remain strong in the future—confirming that retaining Section 251(c)(4) avoided-cost resale is extremely important for those customers—and that competitors' resale of ILEC traditional TDM service remains an indispensable check against ILEC abuse of market power.

IV. CONCLUSION

For the foregoing reasons, the Commission should deny the remaining relief requested in USTelecom's petition for forbearance.

Karen Reidy
Vice President
INCOMPAS
www.incompas.org
kreidy@incompas.org

Respectfully submitted,



John T. Nakahata
Henry Shi
HARRIS, WILTSHIRE &
GRANNIS LLP
1919 M Street NW, Eighth Floor
Washington, DC 20036
(202) 730-1320
Counsel for INCOMPAS

May 28, 2019

Attachment 1

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Petition of USTelecom for Forbearance)	WC Docket No. 18-141
Pursuant to 47 U.S.C. § 160(c) to Accelerate)	
Investment in Broadband and Next-Generation)	
Networks)	
)	
Regulation of Business Data Services for)	WC Docket No. 17-144
Rate-of-Return Local Exchange Carriers;)	
Business Data Services in an Internet Protocol)	
Environment; Special Access for Price Cap)	
Local Exchange Carriers)	
)	
Business Data Services in an Internet Protocol)	WC Docket No. 16-143
Environment)	
)	
Special Access for Price Cap Local Exchange)	WC Docket No. 05-25
Carriers)	

SECOND SUPPLEMENTAL DECLARATION OF R. MATTHEW KOHLY

1. My name is R. Matthew Kohly. I am the Director of Government Affairs and Carrier Relations for Socket Telecom, LLC (“Socket”). I filed a declaration dated August 3, 2018 appended as Attachment 15 to the Opposition filed by INCOMPAS to the USTelecom Forbearance Petition, and a supplemental declaration dated May 8, appended as Attachment 7 to comments filed by INCOMPAS, in the above-referenced proceedings. This declaration further supplements those prior declarations.
2. When Socket first began operating as a Competitive Local Exchange Carrier, Socket served customers solely through unbundled network elements (“UNE”) and, to some extent, resale. For UNEs, Socket relied on copper loops, DS1 loops, DS3 loops, and DS1 Extended Enhanced Loops (“EEL”), which are a combination of DS1 Dedicated Transport combined with DS1

Loops, to serve customers. Since that time, Socket has evolved and is now deploying its own fiber network. Socket now serves 49% of its customer locations with its own fiber, 41% through UNE connections, 10% through alternative third-party providers, or a combination of these three methods.

3. UNEs provide the bridge that allows Socket to expand as a fiber-based voice and data provider.

In every market where Socket has and currently is deploying its own fiber network, Socket relied upon UNEs to first start building a customer base. Socket was able to use that customer base to justify and help fund the construction of its network. EELs were and continue to be an important component of this because they allow Socket to reach distant markets to build that customer base.

4. Access to UNEs, including EELs, also permits Socket to provide services that are not available through other providers, including the incumbent local exchange carrier or the cable company.

For example, Socket provides service to a state law enforcement agency's satellite location that needs a local ISDN-PRI service as a fail-over to route calls to its headquarters site in the event the remote site served by Socket lost connectivity. Without the cost of upgrading its current telephone equipment, this fail-over functionality while retaining feature parity is not possible without the functionality provided by local ISDN-PRI service at the remote location served by Socket. Socket provides this service through UNE EELs. Socket would not be able to provide this service and meet this customer's needs without access to UNE EELs. To our knowledge, Socket is the only competitive choice this customer had to meet its specific needs. It is also worth noting that Socket serves this state law enforcement agency's headquarters location in another telephone exchange, Jefferson City, with its own fiber network. Like the other telephone exchanges where Socket is constructing its own fiber network, Socket started with UNEs.

Socket still relies upon UNEs in Jefferson City as it continues to build out its Jefferson City network.

5. Access to UNEs also permits Socket to have a ubiquitous network to provide service and meet the needs of multisite businesses. For example, Socket provides voice and data service to a multisite community college where Socket serves the main campus with its own fiber but serves satellite campuses in other exchanges through EELs. Socket is able to bond DS1 EELs together to provide telecommunications and dedicated data services and backup call routing at the remote locations. The only way Socket could serve this multi-location community college and provide it with a competitive choice for all of its locations is through the availability of DS1 EELs. Over time, Socket will convert these satellite locations to its own network or seek other options as it expands its network to additional communities in Missouri. Socket has recently converted one of the satellite locations to its own recently expanded network. That recently expanded network is in an exchange that Socket initially served through EELs.
6. UNEs are not the first choice of the means to serve customers. Where other feasible options other than the incumbent are actually available in the market, Socket will choose those options over UNEs. However in many areas served by Socket, there are no other feasible options available.
7. One of the reasons for choosing those alternatives is they can be cheaper than UNEs. For example, when bonding DS1 circuits to attain higher bandwidths, circuits from alternative providers, where actually available in the market, can frequently be cheaper than UNEs. Facilities from third-parties are certainly a better option than BDS services with its out-of-market pricing. However, those third-party alternatives are quite often not available at the location Socket is needing to reach; leaving UNEs as the only feasible option to serve customers.

In addition, UNEs have restrictions and limitations that further limit their usefulness. For example, DS1 Loops and DS1 EELs have restrictions on the quantity that can be ordered. EELs also have additional restrictions such as requiring 911 to be available in the exchange and requiring voice services to be provided over the circuit. These limit the services that can be provided over them. So there is a natural forbearance process already in place.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.

/s/ R. Matthew Kohly

R. Matthew Kohly

May 28, 2019

Date